Reply to Office Action of May 01, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

30

 (currently amended) A method for interleaving print jobs, said method comprising:

receiving a plurality of original print jobs at a non-printer computing device;

35

breaking down partitioning at least one of said original print jobs into a plurality of smaller-sub-jobs with said non-printer computing device;

40

tagging said plurality of smaller-sub-jobs with an output mode code wherein said output mode code is the same for all said smaller sub-jobs originating from the same original print job; and

generating a combined print job, wherein said generating comprises interleaving said smaller sub-jobs and any remaining original print jobs in an alternating sequence of print jobs-with said non-printer computing device.+and

45

sending said alternating sequence of print jobs to a printer in said sequence.

- (currently amended) The method of claim 1 wherein said non-printer computing device is a elient-computing device.
- (previously presented) The method of claim 1 wherein said nonprinter computing device is a network print server.

Appl. No. 10/002,781

Amdt, Dated August 25, 2006

Reply to Office Action of May 01, 2006

4. (canceled)

- (currently amended) The method of claim 1 wherein said <u>partitioning</u> breaking down—is performed by a software print system component in an operating system print server.
- 55 6. (canceled)

60

70

- (previously presented) The method of claim 5 wherein said print system component is independent of an operating system print driver.
- (previously presented) The method of claim 5 wherein said print system component is a network print spooler that is independent of a printer.
- (previously presented) The method of claim 5 wherein said print system component is a network print driver.
- (currently amended) The method of claim 1 wherein said breaking down-partitioning results in sub-jobs of approximately equal size.
- 65 11. (currently amended) The method of claim 1 wherein said breaking down-partitioning results in sub-jobs of approximately equal printing time
 - 12. (currently amended) The method of claim 1 wherein said alternating sequence-interleaving places sub-jobs originating from smaller original print jobs toward the front of the print order.
 - 13. (currently amended) A method for interleaving print jobs, said method comprising:

receiving a plurality of original print jobs at a non-printer, print system component before said <u>original print</u> jobs arrive at a printer; Appl. No. 10/002,781 Amdt. Dated August 25, 2006

Reply to Office Action of May 01, 2006

75 breaking down partitioning at least one of said original print jobs into a plurality of smaller-sub-jobs with said print system component;

> tagging said plurality of smaller-sub-jobs with an output mode code wherein said output mode code is the same for all said smaller sub-jobs originating from the same original print job;

generating a combined print job, wherein said generating comprises interleaving said smaller-sub-jobs and any remaining original print jobs in an alternating sequence of print jobs with said print system component; and

sending said alternating sequence of print jobs to a printer in said sequence.

14. (currently amended) A method for reducing <u>printing</u> delay of smaller print jobs in a print queue, said method comprising:

receiving a plurality of original print jobs at a print system component before said <u>original</u> print jobs arrive at a printer, said plurality of original print jobs comprising at least one larger print job and at least one smaller print job;

breaking down-partitioning said larger original print job into a plurality of smaller sub-jobs;

tagging said smaller sub-jobs with an output mode code;

forming a combined print job, wherein said forming comprises interleaving said sub-jobs with said smaller original print job, in an alternating sequence; and

95

80

85

90

100

105

110

115

120

sending said sub-jobs and said smaller original print job to a printer in said sequence.

- 15. (currently amended) The method of claim 14 further comprising breaking down partitioning said smaller original print job into-smaller sub-jobs and wherein said interleaving comprises interleaving said smaller-sub-jobs from said larger print job with said smaller-sub-jobs from said smaller print job.
- 16. (currently amended) A system for interleaving print jobs before said print jobs arrive at a printer, said system comprising:
 - a receiver for receiving a plurality of original print jobs, before said <u>original</u> print jobs arrive at a printer;
 - a partitioner for breaking down partitioning at least one of said original print jobs into a plurality of smaller-sub-jobs;
 - a tagger for tagging said plurality of smaller-sub-jobs with an output mode code wherein said output mode code is the same for all said-smaller sub-jobs originating from the same original print job;

a combiner for forming a combined print job, wherein said combiner comprises an interleaver for interleaving said smaller subjobs and any remaining original print jobs, in an alternating sequence of print jobs, and

- a sender for sending said alternating sequence of <u>combined</u> print jobs sub-jobs to a printer.
- 17. (currently amended) A computer readable medium comprising instructions for performing functions within a non-printer, print system component, said instructions comprising the acts of:
 - receiving a plurality of original print jobs at a print system component before said <u>original</u> print jobs arrive at a printer;

125

Appl. No. 10/002,781 Amdt. Dated August 25, 2006

130

135

Reply to Office Action of May 01, 2006

breaking down partitioning at least one of said original print jobs into a plurality of smaller-sub-jobs;

tagging said plurality of smaller-sub-jobs with an output mode code wherein said output mode code is the same for all said-smaller sub-jobs originating from the same original print job;

forming a combined print job, wherein said forming comprises interleaving said smaller sub-jobs with any remaining original print jobs, in an alternating sequence of print jobs; and

sending said alternating sequence of print jobs to a printer in said sequence.

18. (canceled)